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## IN THE CLAIMS

Please amend the claims as follows.

- 1-28. (Canceled)
- (Original) A method of controlling a semiconductor parametric test system, comprising: controlling via a control module concurrent operation of semiconductor test equipment and operation of parametric test instrumentation.
- 30. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein the control module is implemented in software.
- (Original) The method of controlling a semiconductor parametric test system of claim
  wherein the control module is implemented in electronic hardware.
- 32. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein the semiconductor test equipment comprises at least one of a wafer loader, a wafer positioner, a wafer chuck, a wafer tray loader, and a prober.
- 33. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein the parametric test instrumentation comprises at least one parametric test instrument having at least one test probe or test receptacle.
- 34. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein operation of the parametric test instrumentation comprises operation of a test equipment module, the test equipment module operable to facilitate control of the semiconductor test equipment.

Filing Date: April 13, 2001

Title: CONCURRENT CONTROL OF SEMICONDUCTOR PARAMETRIC TESTING

- 35. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein operation of the parametric test instrumentation comprises operating a parametric test instrumentation module, the parametric test instrumentation module operable to facilitate control of the parametric test instrumentation.
- 36. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein operation of the parametric test instrumentation comprises operating a semiconductor test parameter module.
- (Original) The method of controlling a semiconductor parametric test system of claim
  wherein the control module is further operable to concurrently manage test data.
- 38. (Original) The method of controlling a semiconductor parametric test system of claim 29, wherein the control module is further operable to provide fault-tolerant control of the test state via a state oscillator module, the state oscillator module operable to control the state of other system modules.
- 39. (Original) The method of controlling a semiconductor parametric test system of claim 38, wherein the state oscillator module changes the state of other system modules.
- 40. (Original) The method of controlling a semiconductor parametric test system of claim 38, wherein operation of the state oscillator module is controlled in synchronization with other system events by the control module.
- 41. (Original) The method of controlling a semiconductor parametric test system of claim 38, wherein the state oscillator module is operable to control module states within the system during operational superstates including an abort superstate, a pause superstate, and a lot run superstate; each superstate comprising an ordered sequence of states.

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CONCURRENT CONTROL OF SEMICONDUCTOR PARAMETRIC TESTING Title:

(Previously Presented) A method of controlling a semiconductor parametric test system, 42. comprising:

controlling via a control module concurrent operation of semiconductor test equipment and operation of parametric test instrumentation;

controlling the state of at least one other system module via a state oscillator module, the state oscillator module controlled by the control module;

providing control of the semiconductor parametric test equipment via operation of a parametric test equipment module; and

providing control of the parametric test instrumentation via operation of a test instrumentation module.

(Previously Presented) A method of controlling a semiconductor parametric test system, 43. comprising:

controlling via a control module implemented in software and executing on a computerized system, concurrent motion of semiconductor test equipment and operation of parametric test instrumentation;

controlling the state of at least one other system module via a state oscillator module, the state oscillator module controlled by the control module and operable to control the state of other system modules in synchronization with other system events;

providing control of the semiconductor parametric test equipment via operation of a parametric test equipment module, wherein the semiconductor parametric test equipment comprises at least one of a wafer loader, a wafer positioner, a wafer chuck, a wafer tray loader, and a prober; and

providing control of the parametric test instrumentation via operation of a test instrumentation module, wherein the parametric test instrumentation comprises at least one of a test probe and a semiconductor test parameter module.

44-58. (Canceled)